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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/729,273 | 12/05/2003 | Ramon Kuczera | G00366/US | 1611 |

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EXAMINER

BINDA, GREGORY JOHN

ART UNIT PAPER NUMBER

3679

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/729,273

Applicant(s)

KUCZERA ET AL.

Examiner

Greg Binda

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on September 6 & 21, 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 10-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/9/05 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17:2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>9/21/05</u> . | 6) <input type="checkbox"/> Other: _____ |

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed September 21, 2005 in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 6, 2005 has been entered.

Election/Restrictions

3. Claims 10-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election of Species I shown in Fig. 3 was made **without** traverse in the reply filed on Feb 16, 2005.

Claim Objections

4. Claim 9 is objected to because in line 6 the word "tracks" is misspelled.

Claim Rejections - 35 USC § 112

5. Claims 9 & 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant

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art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 9, lines 19 & 20 recites the limitation, “the [deformable] energy absorption surface interferes with said ball cage”. There does not appear to be a written description of the limitation in the application as originally filed.

In the amendment filed September 6, 2005 applicant states that the limitation is supported at paragraphs 0032-0035 where the deformable nature of the energy absorption surfaces 80 & 81 is implied because the surfaces are described as dissipating crash energy. However, the only energy absorption surface expressly disclosed as deformable is the surface 74 which interferes only with the torque transmitting balls, not the ball cages (see paragraph 0030) . Conversely, the alternate energy absorption surfaces 80 & 81 that do interfere with the ball cage (see paragraphs 0033-0035) are never described as deformable. Instead they are expressly disclosed as being made from “the same material as the outer joint part 50”.

Claim Rejections - 35 USC § 103

6. Claims 19 & 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Booker et al, US 6,585,601 (Booker).

a. Claim 19. The admitted prior art (see paragraph 0008) discloses a constant velocity cross groove hybrid joint comprising all the limitations in the claim except an energy absorption surface that interferes with a ball cage when the joint is operated beyond its normal axial plunge range. Booker shows a constant velocity which includes an energy absorption surface 34 that interferes with the ball cage 26 when the joint is operated beyond its normal axial plunge range. Booker teaches, at col. 1, lines 58+, that

providing a constant velocity joint with such an energy absorption surface provides means to control the collapsing force profile without adding to the complexity and cost of the joint. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the cross groove hybrid joint of the admitted prior art by including an energy absorption surface that interferes with the ball cage when the joint is operated beyond its normal axial plunge range in order to provide means to control the collapsing force profile without adding to the complexity and cost of the joint as taught by Booker

b. Claim 20. Booker shows the constant velocity joint comprising a grease cap 44. Booker teaches in col. 4, lines 32-35, providing a constant velocity joint with a grease cap in order to provide a means for retaining lubricant and for absorbing energy. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the cross groove hybrid joint of the admitted prior art by including a grease cap in order to provide a means for retaining lubricant and for absorbing energy as taught by Booker.

Allowable Subject Matter

7. Claims 1-8 are allowed.

Response to Arguments

8. Applicant's arguments filed September 6, 2005 have been fully considered but they are not persuasive.

a. In regard to item 5 above, applicant, in essence, argues that the energy absorption surfaces 80 & 81 must be deformable because they are destructible. (Note: by that

definition, every tangible thing known to man is “deformable”). However, in the original disclosure, the word deformable is exclusively used to describe an energy absorption surface 74 made from a compliant material, the circlip 76. The other energy absorption surfaces 80 & 81 were not describe as deformable because unlike the surface 74, they are made from a material that is just rigid as that of the outer joint part 50. As such, there is no description or suggestion in the original disclosure of the other energy absorption surfaces 80 & 81 as deformable.

b. In regard to item 6 above, applicant argues that the combination of the admitted prior art and Booker fails to include all the limitations of the claims because Booker fails to show an energy absorption surface that interferes with torque transmitting balls.

However, the limitation, “an energy absorption surface that interferes with torque transmitting balls” is recited in the alternative and therefore is not by itself a required feature of the claimed invention. As written, the claimed invention need only comprise an energy absorption surface that interferes with EITHER the ball cage OR the torque transmitting balls. The prior art need not suggest any more than that in order to read on the rejected claims.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (571) 272-7077. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Greg Binda
Primary Examiner
Art Unit 3679